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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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32588	7590	02/04/2005	EXAMINER	
APPLIED MATERIALS, INC. 2881 SCOTT BLVD. M/S 2061 SANTA CLARA, CA 95050			JARRETT, SCOTT L	
			ART UNIT	PAPER NUMBER
			3623	

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

JE

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Office Action Summary

Application No.

09/811,667

Applicant(s)

YUAN ET AL.

Examiner

Scott L. Jarrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date see office action.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Workflow System with Process Re-Execution For Fault Correction.

Information Disclosure Statement

2. The information disclosure statements file on October 3, 2001, September 19, 2002, November 19, 2002, December 31, 2002, April 25, 2003, July 3, 2003, October 9, 2003, December 18, 2003, March 29, 2004, August 11, 2004, October 8, 2004 and December 7, 2004 have been made part of the record in the application. It should be noted that the 13 submitted IDSs constitute 40 pages and contain several hundred references. Further it should be noted that a vast majority of the references cited are not relevant to the claimed invention. The applicant is invited to specifically point out those references that may be pertinent to the claimed invention.

3. The information disclosure statements filed October 3, 2001, September 19, 2002, November 19, 2002, December 31, 2002, April 25, 2003, July 3, 2003, October 9, 2003, December 18, 2003, March 29, 2004, August 11, 2004, October 8, 2004 and December 7, 2004 fail to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be

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listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

4. The information disclosure statements filed on March 20, 2001, October 5, 2001, September 19, 2002, November 19, 2002, December 31, 2002, April 25, 2003, July 3, 2003, October 9, 2003, December 18, 2003, March 29, 2004, August 11, 2004, October 8, 2004 and December 7, 2004 fail to comply with 37 CFR 1.98(a)(3) because they do not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-3, 5-16, 18, 20, 22-28, 30, 32, 34-36, 38-43, and 45-50 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Microsoft's BizTalk Server 2000 (BTS) – Enterprise Edition as evidenced by Microsoft BizTalk Server 2000- Enterprise Edition Product Documentation (1999-2000), Anderson, Tim, Head to Head Talking XML – BizTalk Server 2000 (2001), BizTalk Server 2000 An Overview (2001).

Regarding Claim 1 BizTalk Server 2000 Enterprise Edition, herein after referenced as BTS, teaches a workflow management system for modeling, building, scheduling and executing dynamic business processes (BizTalk Server 2000 Product Documentation, Page 1, Paragraph 1; Head to Head, Pages 1-3). BTS further teaches that the system utilizes (is built upon) a plurality of existing Microsoft technologies including but not limited to: Microsoft Transaction Server (MTS), SQL Server, Microsoft Window's NT (NT), Microsoft Internet Information Server (IIS), and Microsoft Visio and is part of the Microsoft .NET Enterprise Framework (BizTalk Server 2000 Product Documentation, Page 1, Paragraph 1; BizTalk 2000 An Overview, Pages 1-2; Figure 1 and as shown in Figure 1 below).

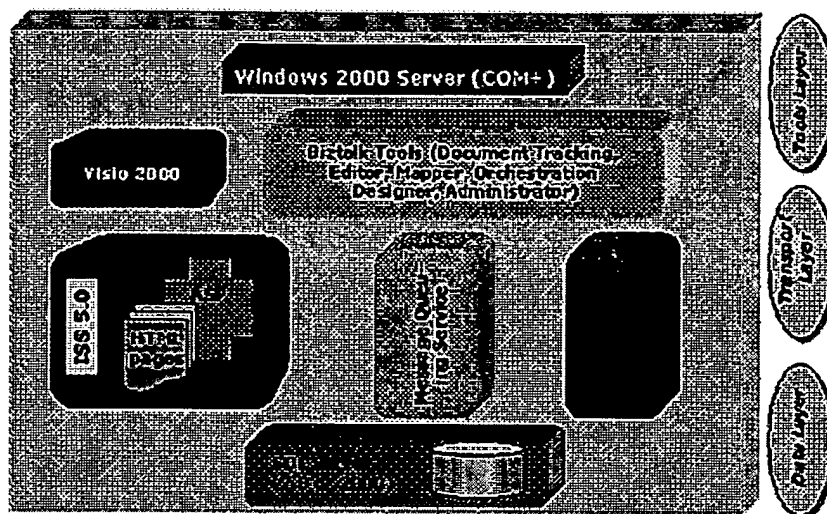


Figure 1: BizTalk Server 2000 Software Architecture (BizTalk 2000 An Overview, Figure 1)

BTS further teaches that the workflow system comprises:

- BizTalk Orchestration services for business process automation and further comprising (BizTalk Server 2000 Product Documentation, Pages 2-4; Tutorial; Pages 25-27; Module 1, Pages 28-38; Figure 33, Page 33 and as shown below in Figure 3; Head to Head, Figure 1, Page 1 and as shown below in Figure 2):

- BizTalk Orchestration Engine for executing workflow scripts;
- BizTalk Orchestration Designer for visual modeling business processes;
- an extensible Markup Language (XML) based scheduling language (XLANG) and XLANG schedules (workflow scripts);

- BizTalk Messaging for connectivity between systems (applications) further comprising (BizTalk Server 2000 Product Documentation, Pages 2-4; Tutorial; Pages 23-27 and 50-60):

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- BizTalk Mapper for creating, editing and managing maps (mapping data sources and records, BizTalk Server 2000 Product Documentation; Tutorial Module 2, Pages 45-49); and
- BizTalk Editor for creating, editing and managing specifications (BizTalk Server 2000 Product Documentation; Tutorial Module 2, Pages 39-44).

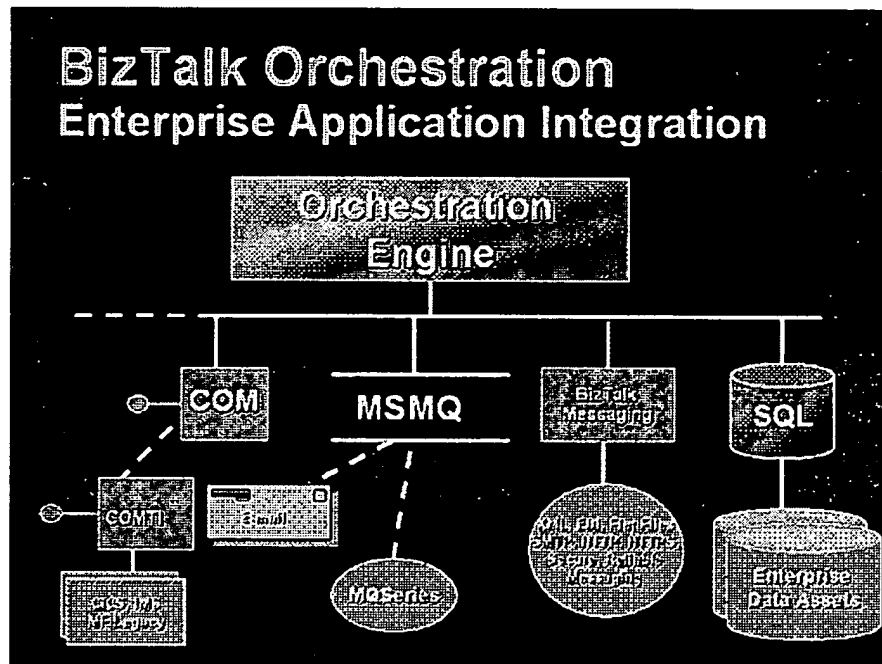


Figure 2: BizTalk Orchestration (Head to Head, Figure 1, Page 1)

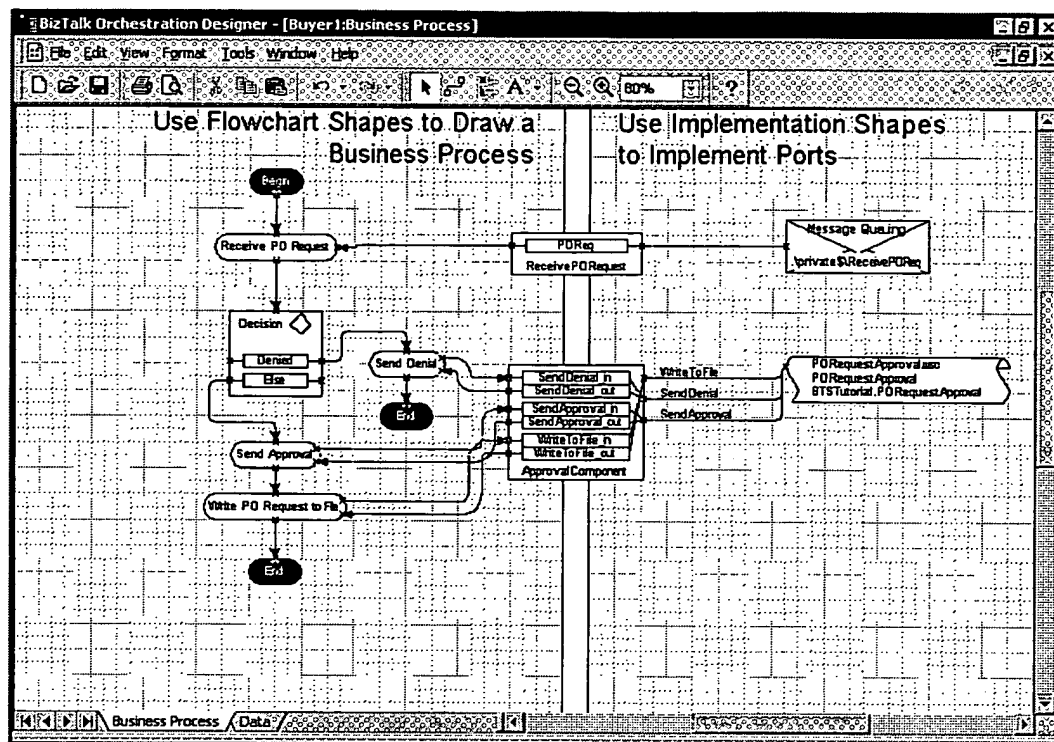


Figure 3: BizTalk Orchestration Designer (BizTalk Server 2000 Product Documentation)

More specifically BTS teaches that the workflow system is:

- configured to execute a plurality of tasks (events, activities, processes, sub-processes) to be performed automatically (BizTalk Server 2000 Product Documentation, Pages 1, 2A, 5; Tutorial Module 1, Pages 28-38; Figure 33, Page 33 and as shown above in Figure 3; Figures 25 and 26, Pages 25-26 and as shown below in Figures 5 and 6); and
- configured to retry, for a pre-determined number of times (retry count, on failure page, retry queue, error handling) to execute one of the plurality of tasks when one of the plurality of tasks fails to be executed (BizTalk Server An Overview; Page 6;

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Figure 3, Page 7 and as shown in Figure 4 below; BizTalk Server 2000 Product Documentation, Pages 6, 9-13).

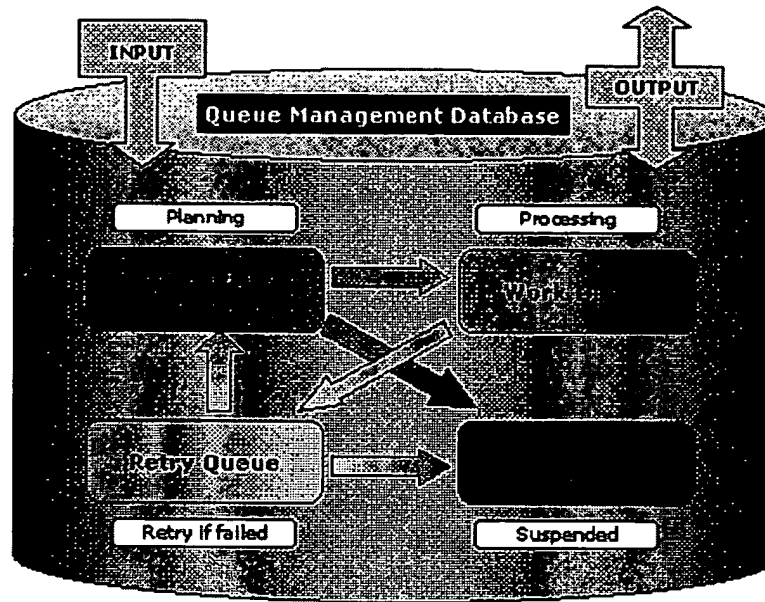


Figure 4: Message queues managed by BizTalk Server (BizTalk 2000 An Overview, Figure 3)

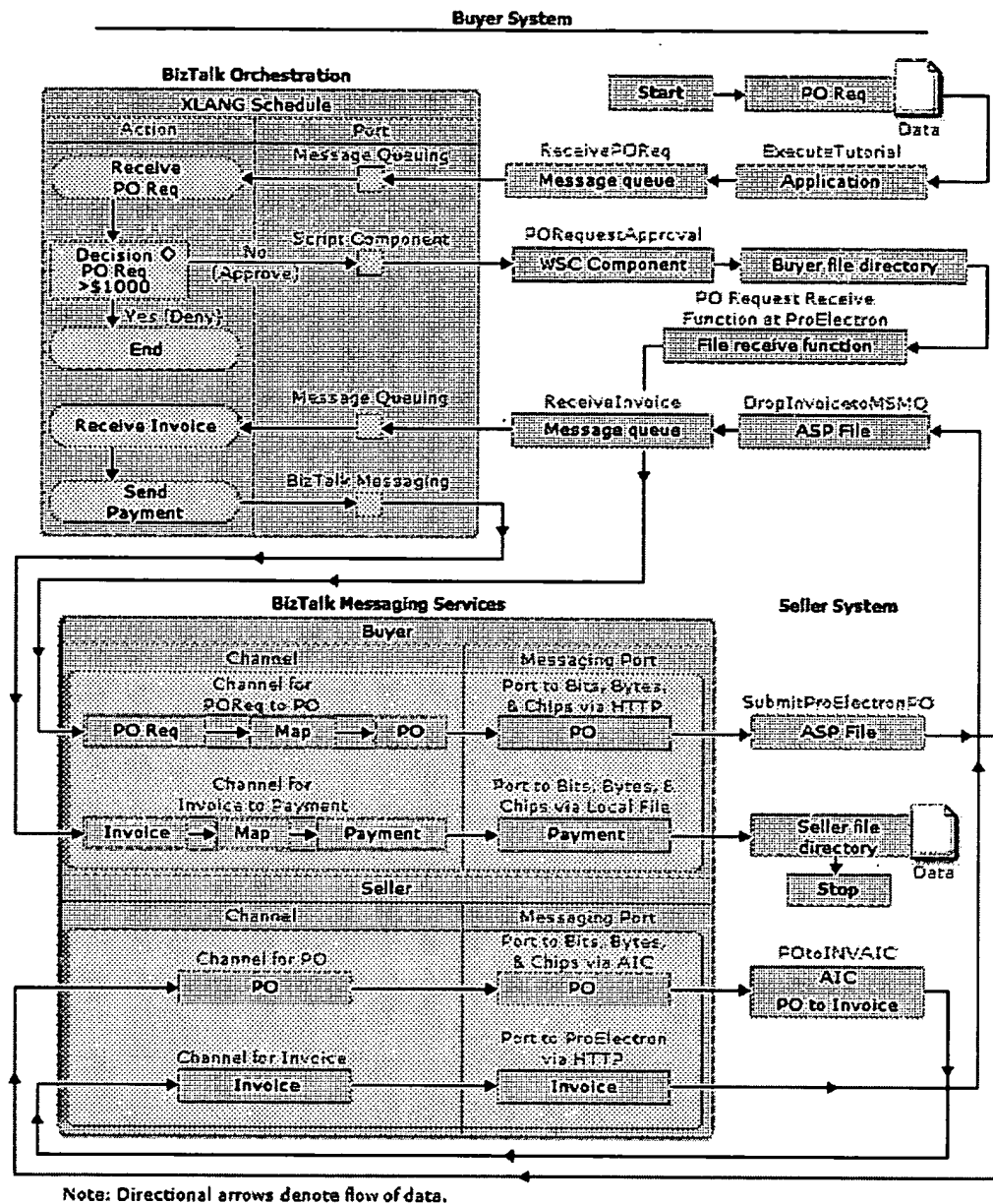


Figure 5: Process/System Diagram (BizTalk Server 2000 Product Documentation, Figure 26, Page 26)

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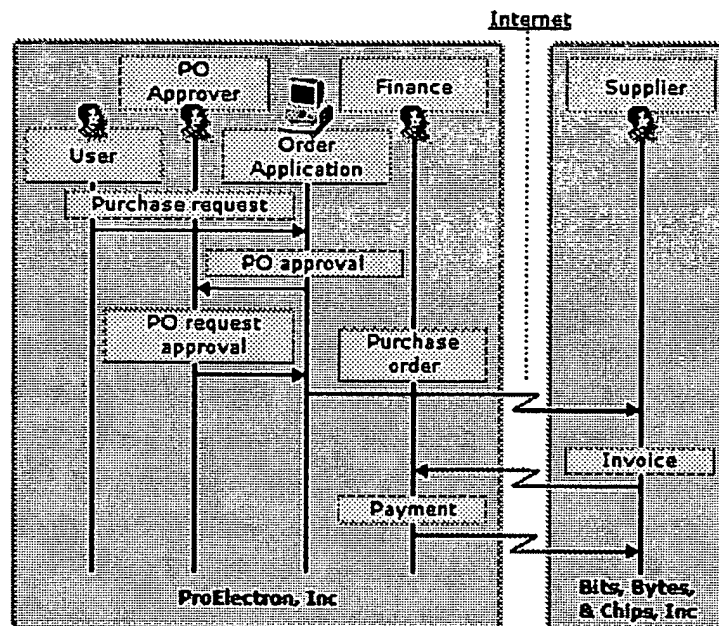


Figure 6: Process Diagram (BizTalk Server 2000 Product Documentation, Figure 25, Page 25)

Regarding Claims 2, 35 and 42 BTS teaches that the workflow management system is configured to process at least one short running server request among the plurality of tasks to be executed automatically, wherein at least one of the short running service requests is executed as a synchronous service (BizTalk Server 2000 Product Documentation, Pages 6, 8, 9-10, 14-15; Figure 14, Page 14 and as shown in Figure 7 below).

Regarding Claims 3, 36 and 43 BTS teaches that the workflow management system is configured to process at least one long running service request among a plurality of tasks to be executed automatically, wherein at least one of the long running service requests is executed as an asynchronous service (BizTalk Server 2000 Product

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Documentation, Pages 1-2, 6, 7, 9-10, 14-15; Figure 14, Page 14 and as shown in Figure 7 below).

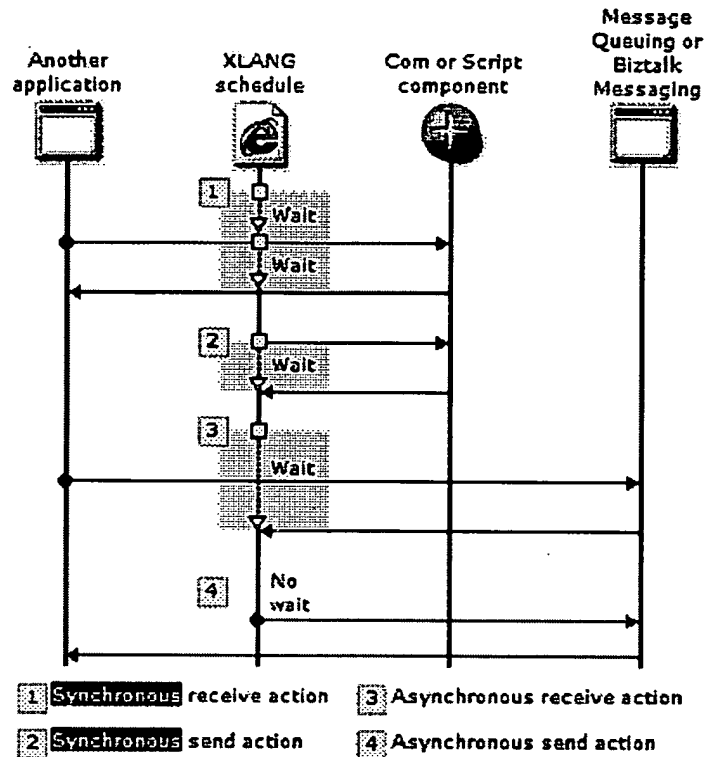


Figure 7: Synchronous and Asynchronous Communications (BizTalk Server 2000 Product Documentation, Figure 14, Page 14)

Regarding Claims 5-6, 38-39 and 45-46 BTS teaches that the workflow management system provides a plurality of means for insuring the fault tolerance of the tasks (activities, events, messages, etc.) associated with the automated business process including but not limited to a plurality of task properties such as Timeout, Backoff Time, Timed Transactions, Retry Count, On Failure page, transactional abort process, and Compensation for Transactions page (BizTalk Server 2000 Product Documentation, Pages 6, 9-13 and 17).

More specifically BTS teaches that the Backoff Time is a property that determines the interval between each attempt to retry a transaction and that the backoff time is used with the retry count value to determine how long to wait before the next transaction retry (BizTalk Server 2000 Product Documentation, Page 9). Further BTS teaches that the Backoff Time is exponential and therefore the intervals between successive retries vary.

Regarding Claims 7, 8, 18 and 30 BTS teaches that the workflow management system utilizes a plurality of standard software interfaces and that one of those interfaces complies with the Component Object Model (COM; Head to Head, Figure 1, Page 1 and as shown in Figure 2 above; BizTalk Server 2000 Product Documentation, Pages 5 and 19-22).

Regarding Claims 9, 40 and 47 BTS teaches that the workflow management system is configured to manage and execute transactions (commit a predetermined number of tasks to be executed as a group; BizTalk Server 2000 Product Documentation, Pages 6-11).

Regarding Claim 10 and 22 BTS teaches that the workflow management system comprises (BizTalk Server 2000 Product Documentation, Pages 1-5; Head to Head, Pages 1-2; Figure 1, Page 1 and as shown above in Figure 2):

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- a plurality of service providers configured to interface with a plurality of software objects, systems, applications and the like;
- a plurality of task processors (scripts, components, subsystems, applications, etc.); and
- a plurality of process controllers coupled to the task processors (Orchestration Engine; Microsoft Windows NT, MTS, IIS) and configured to make a request to retry to execute one of the plurality of tasks upon failure of one of the tasks to be executed by anyone of the plurality of task processors.

Regarding Claim 11, 12, 23 and 24 BTS teaches that the workflow management system is configured to lock another one of the plurality of tasks (events, activities, subsystems, processes) before one of the plurality of tasks is to be executed. BTS further teaches that the task processor is configured to ensure another one of the plurality of tasks is not currently being executed with the task processor attempts to lock another one of the plurality of tasks (BizTalk Server 2000 Product Documentation, repeatable read, lock, Pages 6-7, 9-10).

Regarding Claim 13-16 and 25-28 BTS teaches that the workflow management system further comprises a task initiator (orchestration engine) configured to make a request to the task processor (any process component, application, system, script or the like) to execute another one of the plurality of tasks, wherein the task processors executes the task as requested (BizTalk Server 2000 Product Documentation, Pages 1,

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2A, 5; Tutorial Module 1, Pages 28-38; Figure 33, Page 33 and as shown above in Figure 3; Figures 25 and 26, Pages 25-26 and as shown above in Figures 5 and 6).

BTS further teaches that the task initiator is configured to retry the request to the task processor if the request fails to be executed as discussed above.

Regarding Claims 20 and 32 BTS teaches that the workflow management system supports long running services (transactions) and that the long running transactions have a return address in its API (standard interface) to thereby allow return information from the long running service to be received by the return address (BizTalk Server 2000 Product Documentation, messaging, transport type, source and destination, etc., Pages 50-60).

Regarding Claim 34 and 41 BTS teaches a workflow management system and method comprising the steps of:

- receiving a workflow script (XLANG schedule) that includes a plurality of tasks to for any dynamic business process including the processes associated with the manufacture of a product (BizTalk Server 2000 Product Documentation, Pages 1, 2A, 2-4; Tutorial, Pages 25-27; Module 1, Pages 28-38; Figure 33, Page 33 and as shown above in Figure 3; Figures 25 and 26, Pages 25-26 and as shown above in Figures 5-6); and
- retrying, for a predetermined number of times, to execute one of the plurality of tasks when the one of the plurality of tasks failed to execute as discussed above.

Regarding Claim 48, Claim 48 recites similar limitations to Claims 1-3 and is therefore rejected using the same art and rationale as applied in the rejection of Claims 1-3.

Regarding Claim 49, Claim 49 recites similar limitations to Claims 1 and 5 and is therefore rejected using the same art and rationale as applied in the rejection of Claims 1 and 5.

Regarding Claim 50, Claim 50 recites similar limitations to 34, 35, 36 and 39 and is therefore rejected using the same art and rationale as applied in the rejection of Claims 34, 35, 36 and 39.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4, 19, 21, 31, 33, 37 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft's BizTalk Server 2000 (BTS) – Enterprise Edition as evidenced by Microsoft BizTalk Server 2000- Enterprise Edition Product Documentation

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(1999-2000), Anderson, Tim, Head to Head Talking XML – BizTalk Server 2000 (2001), BizTalk Server 2000 An Overview (2001) as applied to claims 1-3, 5-16, 18, 20, 22-28, 30, 32, 34-36, 38-43, and 45-50 above, and further in view of official notice.

Regarding Claims 4, 37 and 44 BTS teaches that the workflow system enables the user to set a predetermined number of time to retry (attempts, retry count) a failed process (transaction, activities) as discussed above.

BTS does not expressly teach the specific number or range of predetermined retries as claimed.

Official notice is taken that it the BTS workflow system implicitly enables users to select any number of predetermined tries before compensating for the failed transaction through a plurality of means and in doing so provides a much more robust system that is not limited to a set number of predetermined tries.

It would have been obvious to one skilled in the art at the time of the invention that the workflow system as taught by BizTalk Server 2000 Enterprise Edition would have implicitly been capable of having the predetermined number of retries set to any of a plurality of values including but not limited to a number of retries equal to or less than 5 and in doing so provide a more robust and more fault tolerant system that could be

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customized to meet the specific demands of the specific business process it is being applied to.

Regarding Claims 19 and 31 BTS server teaches that the workflow management system provides a plurality of means for identifying and retrieving information (actions, events, activities, data) provided for a plurality of services.

BTS does not expressly teach that short running service do not have a return address.

Official notice is taken that the utilization (retrieved, acted upon, captured, used, etc.) of a callee's return address or other returned information by the caller (procedure calls, object invocation, etc) is optional (arbitrary) is old and well known.

It would have been obvious to one skilled in the art at the time of the invention that the workflow system as taught by BizTalk Server 2000 Enterprise Edition would have implicitly enabled users to configure their processes (systems, applications, objects, etc.) to not capture or utilize the return address or other returned information associated with any process including but not limited to short running processes.

Regarding Claims 21 and 33 BTS does not expressly teach the resource management algorithms utilized as part of the workflow system or those resource

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management algorithms supported by the operating system or hardware system upon which the workflow system is executed.

Official notice is taken that it is old and very well known in the art that freeing resources associated with a process (application, system, user, object) after that process is no longer using or expected to use the resource is a common method for optimizing the performance of systems and limiting resource conflicts.

It would have been obvious to one skilled in the art at the time of the invention that the workflow system as taught by BizTalk Server 2000 Enterprise Edition would have utilized any one of a plurality of resource allocation algorithms (programs, applications, etc.) to increase the systems overall performance and reduce resource conflicts.

9. Claims 17 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft's BizTalk Server 2000 (BTS) – Enterprise Edition as evidenced by Microsoft BizTalk Server 2000- Enterprise Edition Product Documentation (1999-2000), Anderson, Tim, Head to Head Talking XML – BizTalk Server 2000 (2001), BizTalk Server 2000 An Overview (2001) as applied to claims 1-16, 18-28 and 30-50 above, and further in view of Rangachari et al., U.S. Patent No. 6,470,227.

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Regarding Claims 17 and 29 BTS teaches the application of the workflow management system is applicable to a plurality of business processes as discussed above.

BTS does not expressly teach the that one of the processes (tasks, activities) is a service provider to etch lot wafers.

Rangachari et al. teach a workflow system for the automation of the microelectronic manufacturing process wherein a plurality of manufacturing equipment in a fab (semiconductor manufacturing plant) are modeled as objects and managed via a workflow engine (Column 1, Lines 10-20; Column 4, Lines 36-66; Column 5, Lines 49-64; Column 9, Lines 12-32; Column 10, Lines 44-68; Column 12, Lines 47-68; Figure 1, Elements 19, 100, 102).

Rangachari et al. does not expressly teach the specific semiconductor manufacturing equipment managed as part of the workflow.

Official notice is taken that to etch a lot of wafers, as part of the manufacturing of semiconductors is old and very well known in the art.

It would have been obvious to one skilled in the art at the time of the invention that the microelectronic workflow management system, including the system's ability to

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manage any of a plurality of semiconductor manufacturing equipment, as taught by Rangachari et al. would have included the ability to manage a machine (service provider) to etch a lot of wafers.

It would have been obvious to one skilled in the art at the time of the invention that the workflow system as taught by Microsoft BizTalk Server 2000 Enterprise Edition, with its ability to be applied to a manufacturing processes, would have been applied to a plurality of manufacturing processes including but not limited to the production of microelectronic products in view of the teachings of Rangachari et al. and in doing so provided for a robust and readily configurable workflow system for the manufacture of semiconductor products.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Huang, Yennun, U.S. Patent No. 5,748,882, teaches a system and method for fault tolerant computing wherein faults are detected and the recovery from those faults is automated.
- Bandat, Kurt, U.S. Patent No. 5,819,022, teaches a fault correction system and method wherein the system is configured to retry (re-execute) a process that includes a number of activities associated with a workflow graph.
- Flores, et al., U.S. Patent No. 6, 073,109, teach a workflow system and method. Flores et al. further teaches that the workflow system is utilized for mission-critical (continuously running/available) systems and provides a plurality of standard software interfaces (application program interfaces, APIs), transaction support, workflow scripts and workflow script engine (processor, interpreter). Flores et al. further teach that the workflow system locks resources to insure there are no conflicts.
- Berg et al., U.S. Patent No. 5,999,911, teach a workflow system wherein workflow templates consists of a series of steps and each step can have five states.
- Cheung et al., U.S. Patent No. 5,964,838, teach a method and system for fault tolerant computing utilizing clusters to provide consistent startup and reload of processes. Cheung et al. further teach that the system utilizes resource locks and mutexes to avoid resource conflicts.

- Scheier et al., U.S. Patent Publication No. 2002/0035584, teach the utilization of a plurality of Microsoft technologies including Microsoft Transaction Server and Microsoft BizTalk Server 2000 for an Internet-based commerce system.

- Agnihotri et al., U.S. Patent No. 6, 763,456, teach a fault tolerant system wherein a server has self-correction and error handling capabilities. Agnihotri et al. further teach that the system will retry to correct an error a pre-determined number of times (>5, Figure 3, Element 322).

- Du et al., U.S. Patent No. 5,826,239, teach a workflow system (HP OpenPM) wherein the distributed system provides standard APIs and a plurality of servers (engines, methods, services) to manage the workflow processes.

- Du et al., U.S. Patent No. 6,041,306, teach a distributed workflow system (HP OpenPM) developed with an emphasis on performance, availability, scalability and system robustness. Du et al. further teach that the workflow system provides standard APIs and fault recovery (process failure).

- Prakash, Raj, U.S. Patent No. 6,718,460, teaches a method and system for error handling in a computer system at the hardware level.

- Mohan C., Recent Trends in Workflow Management Products, Standards and Research (1997), teaches the plurality of standards, systems, research and other efforts related to workflow management systems.

- Vijayan, Jaikumar, Fault Tolerant Computing (2000), teaches the prevalence of fault tolerant, high availability and continuous service systems and methods that protect mission-critical applications. Vijayan further teaches a plurality of specific businesses

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that offer fault tolerant solutions including Marathon Technologies Corporation that provides fault-tolerant configurations for Windows NT systems.

- Shan, Ming-Chien et al., HP Workflow Research: Past, Present and Future (1997), teach the plurality of research and system development efforts at Hewlett Packard in the workflow management systems area.

- Vasters, Clemens F., BizTalk Server 2000: A Beginners Guide (2001), teaches an overview of the BizTalk Server 2000 as part of Microsoft's .NET Framework.

- Microsoft BizTalk Server 2000 Document (2001), teaches the utilization of BizTalk Server 2000 for business process automation.

- Thurrott, Paul, Microsoft Ships BizTalk Server 2000 (2001), teaches that the BizTalk Server product was announced in March 1999, available in beta version in the summer of 2000 and released to manufacturing in December of 2000.

- Gillmor, Steve et al., Talking About BizTalk (2000), teach the application of Microsoft's BizTalk Server 2000 product for business process automation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (703) 306-5679. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SJ
2/2/2005



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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600